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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,374	08/07/2001	Erik Dahlman	8194-585	8934
20792 7590 11/23/2007 MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627			EXAMINER GHEBRETINSAE, TEMESGHEN	
			ART UNIT 2611	PAPER NUMBER
			MAIL DATE 11/23/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/923,374

Applicant(s)

DAHLMAN ET AL.

Examiner

Temesghen Ghebretinsae

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-70 and 72-108 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-49, 69-85 and 99-108 is/are allowed.
- 6) ☒ Claim(s) 50-62 and 86-90, 97-98 is/are rejected.
- 7) ☒ Claim(s) 63-68 and 91-96 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. It would be of great assistance to the Office if all incoming papers pertaining to a filed application carried the following items:

1. Application number (checked for accuracy, including series code and serial no.).
2. Group art unit number (copied from most recent Office communication).
3. Filing date.
4. Name of the examiner who prepared the most recent Office action.
5. Title of invention.
6. Confirmation number (See MPEP § 503).

Response to Arguments

2. Applicant's arguments with respect to claims 1-70-72-108 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 58, 61,62,86,89,90,97,98 are rejected under 35 U.S.C. 102(b) as being anticipated by Gardner (5,517,530).

5. Gardner discloses a receiver comprising a multi-process demodulator circuit operative to process a communication signal according to respective, different first and second demodulation techniques (24,22) to produce respective, different first and second symbol representations; and a quality discriminator circuit (26,28,30) operative to decode a first one of the first and second symbol representations to determine a

quality for the first one of the first and second symbol representations and, responsive to the determined quality, to determine whether to further process the first symbol representations or to decode the second symbol representation. The first and second demodulation technique comprises respective non-spread spectrum demodulation process as claimed in claim 61 and 89. The quality discriminator circuit is operative to adaptively select the first one of the first and second symbol representations for first decoding as claimed in claim 62 and 90. The receiver comprises a radio receiver as claimed in claim 97. The receiver includes one of a wireless communication terminal as claimed in claim 98. (see fig. 2 and 3 and col.3, line 65 to col.4, line 23.)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 50-51, 53-57, 59-60, 87-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner.

8. Consider claims 50, 55-56 Gardner discloses a receiver comprising a multi-process demodulator circuit operative to process a communication signal according to respective, different first and second demodulation techniques (24,22) to produce respective, different first and second symbol representations; and a quality discriminator circuit (26,28,30) operative to decode a first one of the first and second symbol representations to determine a quality for the first one of the first and second symbol

representations and, responsive to the determined quality, to determine whether to further process the first symbol representations or to decode the second symbol representation. The first and second demodulation technique comprises respective non-spread spectrum demodulation process as claimed in claim 61 and 89. The quality discriminator circuit is operative to adaptively select the first one of the first and second symbol representations for first decoding as claimed in claim 62 and 90. The receiver comprises a radio receiver as claimed in claim 97. The receiver includes one of a wireless communication terminal as claimed in claim 98. (see fig. 2 and 3 and col.3, line 65 to col.4, line 23.)

9. Gardner differs from the claimed invention in that the signal is not spread spectrum signal as claimed in claims 50, 52, 59, 87. However, Gardner disclose that while the present invention is discloses and described with respect to certain communication type, it is understood to those skilled in the art that his invention can be applied to any type of communication.

10. As per claim 51-52,57,60,88 the first and second demodulation techniques of Gardner are operative to provide different levels of performance in a given interference environment.(see col.3, lines 24-38)

11. As per claim 53-54, the first and second symbol representations are generated in series/parallel (see col.4, lines 24-29)

Allowable Subject Matter

12. Claims 1-49, 69-70, 72-85, 99-108 are allowed.

13. Claims 63-68, 91-96 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

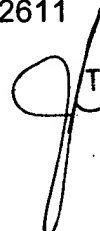
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temesghen Ghebretinsae whose telephone number is 571-272-3017. The examiner can normally be reached on Monday-Friday from 8 to 6. The examiner can also be reached on alternate.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ghayour Mohammed, can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

14. T.Ghebretinsae 11/21/07

Temesghen Ghebretinsae
Primary Examiner
Art Unit 2611

 TEMESGHEN GHEBRETINSAE
PRIMARY EXAMINER